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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,876	10/08/2003	Timothy Gordon Godfrey	050337-1280 (05CXT0068WL)	6414
	7590 03/10/200 BOEHNEN HULBER	9 RT & BERGHOFF LLP	EXAMINER	
300 S. WACKER DRIVE 32ND FLOOR CHICAGO, IL 60606			JUNG, MIN	
			ART UNIT	PAPER NUMBER
,			2416	
			MAIL DATE	DELIVERY MODE
			03/10/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Comments	10/680,876	GODFREY, TIMOTHY GORDON				
Office Action Summary	Examiner	Art Unit				
	Min Jung	2416				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>08 C</u>	October 2003					
· <u> </u>	s action is non-final.					
		esecution as to the merits is				
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
·	=x parto Quayro, 1000 0.2. 11, 10	, o o. o. o. o.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-21</u> is/are pending in the application	_ · · · · · · · · · · · · · · · · · · ·					
4a) Of the above claim(s) is/are withdra	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-21</u> is/are rejected.	6)⊠ Claim(s) <u>1-21</u> is/are rejected.					
7) Claim(s) is/are objected to.	Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
	1. Certified copies of the priority documents have been received.					
3. Copies of the certified copies of the priority documents have been received in this National Stage						
	·	od III tilis National Stage				
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO/SB/08) 5) Notice of Informal Patent Application						
Paper No(s)/Mail Date 6) U Other:						

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DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-21 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/830,575, and over claims 1-20 of copending application No. 10/861,065. Although the conflicting claims are not identical, they are not patentably distinct from each other because the essence of both the present claims and the copending applications is in determining the transmit opportunity based on the timing information relating to the frame received, and using that result, having a first transceiver and a second transceiver communicate in a non-overlapping manner.

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This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1, 8, 15, 16, 20, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Awater et al., US 2001/0010689 (Awater).

Awater discloses interoperability for Bluetooth/IEEE 802.11. Awater teaches the device and scheme for preventing interference situation caused by transmitting and/or receiving in an overlapped manner. See Abstract.

Regarding the present claims, Awater teaches receiving at a first transceiver a beacon frame wherein the beacon frame comprises a beacon interval and wherein the first transceiver communicates in accordance with a first communications protocol using a shared-communications channel (IEEE 802.11 device communicating in accordance with 802.11 standards; beacon frames are sent by an AP at a regular interval, Fig. 1, [0044] and [0007]); determining a transmit opportunity on the shared-communications channel wherein the transmit opportunity is based on the time at which the beacon frame is received and on the beacon interval (interoperability device together with a control circuitry make the decision as to which mode of operation to switch to or

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activate, [0048]-[0050], transmission inherently depends on the beacon frame reception time and the beacon frame interval); notifying a second transceiver of the transmit opportunity wherein the second transceiver communicates in accordance with a second communications protocol using the shared-communications channel (the notifying step is inherent in Awater teaching because when a decision is made to activate one mode of operation from another mode of operation, the transceiver has to be notified of it one way or another; Awater fails to teach even a simple activation inherently includes the meaning of notification).

Regarding claims 15, 16, 20, and 21, the same functional reasoning provided above is applicable. For the physical teaching, Awater provides a first air interface subsystem comprising a receiver, a processor, and an interface; a second interface subsystem; the host computer associated with both first air interface subsystem and the second air interface subsystem (Fig. 1 and Fig. 6).

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 2-7, 9-14, 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Awater et al., US 2001/0010689 (Awater).

Regarding claims 2-7, 9-14, and 17-19, Awater fails to teach the implementation details specified. However, powering down in an inactive state, notification of the timing information relating to the transmit opportunity, keeping the transceiver in a power on state, muting a third transceiver basing the transmit opportunity on request to transmit, and the request being periodic, are the kinds of details that are commonly used and can be readily incorporated into the system without changing the essence of the teaching. Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to employ the well-known teachings listed when making the method and apparatus of Awater.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Agrawal et al. PG Pub., the Ho et al. PG Pub., the Sherman PG Pub., the Williams et al. PG Pub., the Bridgelall Patent, the Zehavi patent, the Zehavi et al. patent, and the Knauerhase et al. PG Pub., are cited for further references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Min Jung whose telephone number is 571-272-3127. The examiner can normally be reached on Monday through Friday 9:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Min Jung/ Primary Examiner, Art Unit 2416